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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,590	02/28/2002	Brian F. Ruff	1528.031US1	9015
21186	7590	06/06/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			DINH, TIEN QUANG	
P.O. BOX 2938			ART UNIT	
MINNEAPOLIS, MN 55402-0938			PAPER NUMBER	
			3644	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/086,590

Applicant(s)

RUFF ET AL.

Examiner

Tien Dinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-20 is/are allowed.
- 6) ☒ Claim(s) 1-14 and 21-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-24 are rejected under 35 U.S.C. 102(a) as being anticipated by Kubota.

Kubota discloses (fig. 4) a method of mounting an avionic instrument system comprising using a flexible guide (34, 35, 44) adapted for connection between a first device (not shown) and a second device (fig. 8, item 50) wherein the flexible guide limits communication line movement to substantially a two dimensional plane. Note that the wiring system is disclosed as applicable to a vehicle instrument panel, and would therefore be applicable to any vehicle such as an automobile, truck, bus, aircraft, etc. Further, the statements of the claims being drawn to "an avionic wiring system" or "an avionics instrument mounting system" are considered statements of intended or desired use, and these elements of the claims, as well as other statements of intended use, do not serve to patentably distinguish the claimed structure over that of the reference.

Note also that connection to a second device is inherent in the disclosure of Kubota, since it is obvious that the wires are used to connect two devices. As to limitations that are considered to be inherent in a reference, note the case law of In re Ludtke, 169 USPQ 563, In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594, In re Best et al., 195 USPQ 430, and In re Brown, 173 USPQ 685, 688.

Please note that extending and retracting the flexible guides are steps that are needed so that the display unit can be mounted correctly. The display unit is a flat screen.

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Regarding claim 22, the wiring guide of Kubota would limit movement to a vertical two dimensional plane. Regarding claim 24, the flexible guide of Kubota includes a number of jointed segments.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-12, 14, 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cronin in view of Long.

Cronin discloses a flexible guide 10 to connect a first device and a second device 18 (the second device is shown in figure 2) which limits communication line movement adjacent to a mounting surface 22, flexible guide frame 30 attached to the flexible guide and the flexible guide frame is adapted to be mounted to the mounting surface/frame 22, and a stop 32, but is silent on the means to limit the line movement to a two dimensional plane. However, Long discloses that means 14, 16 to limit a line to a two dimensional plane (either vertically or horizontally) is well known in the art. Please note that "lines 12A, 12B" is limited to a two dimensional plane since it can be pulled but is limited in movement by parts 14, 16.

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It would have been obvious to one skilled in the art at the time the invention was made to have used limiting parts to limit the line movement to a two dimensional plane in Cronin's system as taught by Long to restrict line movements for safety reason.

Please note that when the mounting frame is removed, the communication line can be accessed between the mounting surface and the second device by pulling.

Re claims 3 and 11, the flexible guide can be an "S" or "C" shape by merely shaping the flexible guide of Cronin into an "S" shape and holding it in place.

Please note that the Cronin inherently discloses a first device that is an avionic device. The display of Cronin is a flat screen.

Please note that the method of manufacturing is met by Cronin in view of Long.

Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cronin as modified by Long as applied to claims 1 and 7 above, and further in view of Miller.

Cronin as modified by Long discloses all claimed parts except for the jointed segments. However, Miller discloses that flexible guide means that are segmented are well known in the art.

It would have been obvious to one skilled in the art at the time the invention was made to have made the flexible guide means of Cronin as modified by Long into segments as taught by Miller as a substitution of parts.

Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 4,736,910 granted to O'Quinn et al., in view of Kubota.

Regarding claim 28, O'Quinn et al. disclose (see abstract, col. 8, lines 25-30, etc.) an aircraft with an avionics instrument system comprising: an avionic module adapted to process avionic data; a separate display unit adapted to display at least a portion of the avionic data and coupled to the avionic module by at least one communication line. O'Quinn et al do not disclose a display unit moveable from a first location adjacent the module to a second location apart from the module or a flexible guide. Kubota teaches a flexible guide (fig. 4) which would allow connection of a display unit and movement of the display unit from a first location adjacent the module to a second location apart from the module in order to facilitate connection of the wiring to the display unit.

Regarding claim 29, O'Quinn et al. disclose a number of modules coupled to one or more display unit(s).

Regarding claim 30, O'Quinn et al. disclose the use of a generic display device (col. 8, lines 29-30). A flat panel screen is a display device and thus would have been an obvious variation.

### *Response to Arguments*

Applicant's arguments filed 2/10/05 have been fully considered but they are not persuasive.

Please note that the Examiner has used already cited arts Cronin and Long to reject the amended claims. This renders the applicant's arguments moot. Kubota is used to reject claims 21-24 as was done in the previous office action. Kubota discloses the method in which the flexible guide can be extended or retracted to mount the display unit. Please note that in claim 21, "the extending the flexible guide during a connecting operation with the display unit" does

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not necessarily mean directly connecting the display unit while the flexible guide is extended.

The Examiner broadly interprets this as extending the flexible guide so that it can be aligned with other parts or it can be worked upon and once done the flexible guide is then retracted into place where the display unit is then mounted. This reads upon what is claimed.

Re claim 28, please note that Kubota discloses that display unit is capable of being moved from a first location to a second location and vice versa. The element 40 of Kubota does not have to be set in place before the display unit 50 is attached to the communication line. Element 40 of Kubota can be free from attachment to the element 17 and still can be attached to element 50 without attachment to element 17. Thus this meets what has been claimed.

#### *Allowable Subject Matter*

Claims 15-20 are allowed.

#### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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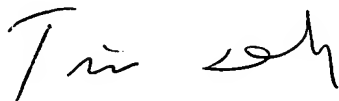
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 571-272-6899. The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TD

A handwritten signature in black ink, appearing to read "Tien Dinh", is written below the typed name "TD".